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REMARKS/ARGUMENTS

Upon entry of the instant amendment, claims 1-12 are pending. Claims 1 and 3 have been amended. Claims 13-24 have been previously withdrawn. Based upon the remarks below, the Examiner is respectfully requested to reconsider and withdraw the rejection of these claims.

CLAIM REJECTIONS – 35 U.S.C. § 103

Claims 1 and 2 have again been rejected under 35 U.S.C. § 103(a) as being unpatentable over Brighton et al, U.S. Patent No. 5,132,775 ("Brighton") in view of Rhodes et al, U.S. Patent No. 4,536,951 ("Rhodes") and Wolf, "Silicon Processing for the VLSI Era", Vol. 2, Process Integration ("Wolf").

It is again respectfully submitted that the Examiner has failed set forth a *prima facie* case of obviousness for this rejection and the rejections of claims 3-12 in which the Examiner combines from 3 to 5 references to support the rejections. In particular, in order to establish a *prima facie* case of obviousness, three criteria must be met as set forth in MPEP § 2143.

"First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination reasonable expectation of success must both be found in the prior art, not in the Applicant's disclosure."

It is respectfully submitted that the claims, as amended, define subject matter not disclosed or suggested by the claims, as amended. In particular, the claims now recite a low dielectric polymer applied directly to the plated vias and the seed layer or applied directly to a dielectric layer applied to the plated vias and the seed layer; the polymer being selected to enable

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etching without an etch barrier. The Applicant agrees with Paragraph 2 of the Official Action, that this claimed feature is not disclosed in the Brighton et al patent. The Rhodes et al patent is cited as disclosing a polymer coating, i.e. a polyimide coating. However, it is clear that the selection of the polyimide coating in the Rhodes et al patent requires a barrier layer 6 to prevent over etching of the polyimide. The barrier layer is an additional process step thus making the process disclosed in the Rhodes et al patent more expensive. The claims, as amended, solve this problem by eliminating the need for the additional process step by using a polymer that eliminates the need for an etch barrier. None of the other reference disclose or suggest the claimed features mentioned above. In addition, it is respectfully submitted that the Examiner's failure to provide a suggestion or motivation to combine the references from the previous Office Action response are hereby incorporated by reference. For all of the above reasons, the Examiner is respectfully requested to reconsider and withdraw this rejection.

Claim 3 has been rejected under 35 USC § 103(a) as being unpatentable over the Brighton, Rhodes and Wolf references and further in view of Lee US Patent No.6,800,928. As mentioned above, the Brighton, Rhodes and Wolf references do not disclose the claimed features mentioned above. The Lee patent likewise does not disclose the claimed features mentioned above. For these reasons and the reasons above, it is respectfully submitted that the Examiner has failed to set forth a prima facie case of obviousness. The Examiner is respectfully requested to reconsider and withdraw this rejection.

Claims 4 and 5 have been rejected under 35 USC § 103(a) as being unpatentable over the Brighton, Rhodes and Wolf references and further in view of Lin US Patent No. 5,929,525 ("Lin"). Claim 6 has been rejected as been rejected under 35 USC § 103(a) as being unpatentable over the Brighton, Rhodes, Wolf and Lin references further in view of Tsai US Patent No. 5,252,515 ("Tsai"). Claims 7 and 8 have been rejected under 35 USC § 103(a) as being

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unpatentable over the Brighton, Rhodes and Wolf references and further in view of Hendricks et al US Patent No. 6,153,525 ("Hendricks"). Claim 9 has been rejected under 35 USC § 103(a) as being unpatentable over the Brighton, Rhodes, Wolf references and Hendricks references further in view of the Applicant's Admitted Prior Art. Claims 10 and 11 have been rejected under 35 USC § 103(a) as being unpatentable over the Brighton, Rhodes and Wolf references and further in view of Furukawa et al US Patent No. 6,387,783 ("Furukawa"). Finally, claim 12 has been rejected under 35 USC § 103(a) as being unpatentable over the Brighton, Rhodes, Wolf and Furukawa references and further in view of Samoto US Patent No. 5,583,063 ("Samoto").

In order to keep this response as brief as possible, the rejection of claims 4-12 is addressed collectively below. First, these claims 4-12 are all dependent on claim 1. Accordingly, the arguments set forth above with respect to claim 1 are incorporated by reference. The Brighton, Rhodes and Wolf references were discussed above. None of the other references recited in support of the rejection of claims 4-12 disclose or suggest a process utilizing the claimed features mentioned above. As clearly set forth in MPEP § 2143, in order to make out a *prima facie* case of obviousness the references must disclose all of the claim limitations including the features added by the instant amendment. As mentioned above, none of the references disclose the features added to the claims at issue by the instant amendment. As such, it is respectfully submitted that the Examiner has failed to set forth a *prima facie* case of obviousness as required by MPEP § 2143 for this reason alone.

Moreover, it is respectfully submitted that the Examiner is combining 4 and 5 references to support these rejections. It is respectfully submitted that the Examiner has failed to show that the suggestion to combine the references is within the references themselves. Without such a showing, it is respectfully submitted that the Examiner is impermissibly combining the references using the claims as a blueprint. For these reasons and all of the above reasons and the


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reasons submitted in the previous Office Action response, the Examiner is respectfully requested to reconsider and withdraw the rejection of claims 4-12.

Respectfully submitted,

KATTEN MUCHIN ROSENMAN LLP

By:


John S. Paniaguas
Registration No. 31,051
Attorney for Applicant(s)

KATTEN MUCHIN ROSENMAN LLP
1025 Thomas Jefferson Street N.W.
East Lobby, Suite 700
Washington, DC 20007-5201
(312) 902-5200
(312) 902-1061

Customer No.: 27160